IN THE CLAIMS:

Please cancel without prejudice the claims withdrawn from consideration — *i. e.* claims 18 through 25, and 28.

Also kindly change claims 1, 3 through 7, 11, 13, 26 and 27, to read as indicated below.

1. (currently amended) A method for color-calibrating a printing device; said method comprising the steps of:

using the printing device to print a gray ramp with black ink;

using the same said printing device to print a nominally gray ramp with composite-black ink;

measuring and comparing the printed black-ink gray ramp and the printed composite-black gray ramp [[s]]; and

employing the measured black-ink ramp as a standard to correct the measured composite-black ramp.

2. (original) The method of claim 1, wherein:

all the steps are performed automatically.

3. (currently amended) A [The] method [of claim 1,] for color-calibrating a printing device; said method comprising the steps of:

using the printing device to print a gray ramp with black ink;

using the same said printing device to print a nominally gray ramp with composite-black ink;

measuring and comparing the printed black-ink gray ramp and the printed composite-black gray ramp; and

employing the measured black-ink ramp as a standard to correct the measured composite-black ramp;

wherein [:] the employing step comprises treating the black-ink ramp as a zero-chroma standard to correct chroma found in the composite-black ramp.

4. (currently amended) The method of claim 2 [[1]], further comprising the step of:

using the compared black-ink ramp and composite-black ramp [[s]] to also correct other printing with composite black.

5. (currently amended) The method of claim 4, further comprising the step of:

using the compared black-ink ramp and composite-black ramp [[s]] to also correct other colors to be printed by the printer.

6. (currently amended) The method of claim 2 [[1]], wherein:

the using step with composite-black ink comprises printing, for a particular gray tonal level, plural combinations of nonblack inks.

7. (original) The method of claim 1 [[6]], wherein:

the using step with composite-black ink comprises printing, for a particular gray tonal level, plural combinations of nonblack inks; and

the plural combinations of nonblack inks substantially bracket nominal values for the particular gray value.

8. (original) The method of claim 7, wherein the employing step comprises:

searching the printed and measured plural combinations of nonblack inks to find a combination that is nearest the corresponding particular gray value.

9. (original) The method of claim 7, wherein the employing step comprises:

searching the printed and measured plural combinations of nonblack inks to find at least two combinations that bracket a corresponding particular gray value; and

interpolating among the at least two combinations to determine an optimal combination for matching the corresponding particular gray value.

10. (original) The method of claim 7, wherein said printing with plural combinations of nonblack inks comprises:

optimized bracketing of the nominal values.

11. (currently amended) The method of claim 10, wherein:

said optimized bracketing comprises printing with said plural combinations of nonblack inks that surround the nominal value in a pattern <u>of color values</u>, in color space, that is substantially centered on the nominal value.

12. (original) The method of claim 6, wherein the employing step comprises:

searching the printed and measured plural combinations of nonblack inks to find a combination that is nearest a corresponding particular gray value.

13. (currently amended) A [The] method [of claim 1,] for color-calibrating a printing device; said method comprising the steps of:

using the printing device to print a gray ramp with black ink;

using the same said printing device to print a nominally gray ramp with composite-black ink;

measuring and comparing the printed gray ramps; and

employing the measured black-ink ramp as a standard to correct the measured composite-black ramp; wherein:

the measuring and comparing step comprises inserting measured values of the printed gray ramps into equations representing a colorimetric model of the printer; and

the employing step comprises solving the equations to derive correction values for use in adjusting ink signals in future printing.

14. (original) The method of claim 13, wherein:

the colorimetric equations include plural expressions having the form:

$$H(t,n,a) = D(t,n)\cdot E(t,n)\cdot \ldots \cdot F(t,n),$$

wherein H is a hybrid color printed by use of at least two constituent colors,

D is one of the constituent colors,

E is another of the constituent colors,

". . ." represents possible additional constituent colors of said at least two,

F is a correction factor,

t is a tonal level at which H, D, E and ". . ." are evaluated,

n is a sensor channel at which all the above are evaluated, and

a is a scaling factor that relates overall range of the hybrid color with overall range of the constituent colors.

15. (original) The method of claim 14, wherein:

in some of the expressions, H = cK, D = S_1 and E = S_2, where cK is composite black and S_1 and S_2 are secondaries; and

in others of the expressions, H = S, D = P_1 and E = P_2, where S is a secondary and P_1 and P_2 are primaries.

16. (original) The method of claim 15, wherein:
in said others of the expressions a = 1.

17. (original) The method of claim 13, wherein:
the equations are solved by iteration.

18. - 25. (canceled)

26. (currently amended) A method for automatically color-calibrating a printer; said method comprising the steps of:
using the printer to print a ramp in a particular color with actual ink of that color;
using the same said printer to print a ramp nominally in said particular color but with inks of other colors;
measuring and comparing the actual-ink printed ramp and the other-colors-inks printed ramp; and
using the measured actual-ink ramp as a standard to calibrate and correct the measured other-colors-inks ramp and also to correct other printing with said other colors.

27. (currently amended) A method for automatically color-calibrating a printer; said method comprising the steps of:

using the printer to print a ramp in a particular color with actual ink of that color;

using the same said printer to print a ramp nominally in said particular color but with inks of other colors;

measuring and comparing the printed ramps; and

using the measured actual-ink ramp as a standard to calibrate and correct the measured other-colors-ink ramp and also to correct other printing with said other colors; [The printer of claim 26,] wherein:

said actual ink is selected from the group consisting of:

red ink,

green ink, and

blue ink;

and said inks of other colors are selected from the group consisting of, respectively:

magenta ink and yellow ink,

yellow ink and cyan ink, and

cyan ink and magenta ink.

28. (canceled)